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APHIDS FROM MT. TIMPANOGOS, UTAH¹

PART 2

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An unusual aphid was collected by Dr. C. Lynn Hayward on *Monarda* (?) at Aspen Grove, Mt. Timpanogos, Utah, June 13, 1940. This aphid fits no genus or species with which the writer is acquainted. Appreciation is expressed to Professor M. A. Palmer for her suggestions concerning this interesting aphid.

Utamphorophora Knowlton, n. gen.

Frontal tubercles moderately developed, *Myzus*-like, but possessing finger-like projections resembling those in *Phorodon*; antennae approximately length of body, bearing hairs which are sparse and inconspicuous; cornicles long and swollen, as in *Amphorophora*; cauda long, constricted near middle, as in many species of *Amphorophora* and *Macrosiphum*; wings with normal venation as in *Macrosiphum*.

TYPE: *Utamphorophora timpanogos* Knowlton.

Utamphorophora timpanogos Knowlton, n. sp.

ALATE VIVIPARA: Body 2.4 mm. long and 1.8 across the abdomen; ocular tubercles present; antennae dusky on mature specimens, 2.3 mm. long, armed with a few inconspicuous hairs; antennal tubercles distinctly exceed vertex, somewhat gibbus, each possessing a finger-like projection; antennal III, .68 to .71 mm., armed with 5 to 12 rounded sensoria (5 and 8 on one specimen, 9 and 12 on another); IV, .42 to .442, without sensoria; V, .395 to .426; VI, .14 to .15 plus .73 to .79 mm.; rostrum reaching meso-thorax, rostral tip slenderly obtuse; ros-

¹ Continued from Great Basin Naturalist, 3: 5-8, 1942.

tral IV, + V, .1 mm.; hind tibia 1.65 to 1.73; hind tarsi .126; legs dusky; cornicles and cauda as in many *Amphorophora*; cornicles dusky, .47 to .49, swollen over distal two-thirds of their length; cauda less dusky than legs and cornicles, with two pairs of lateral hairs on portion beyond median constriction, .28 mm. long.

NYMPHS WITH WINGPADS: Antennal tubercles gibbus, *Myzus*-like plus conspicuous, converging, triangular *Phorodon*-like projections.

TAXONOMY: *U. timpanogos* n. sp. resembles *Myzus monardae* Williams but differs in possessing longer cornicles and cauda, with constriction in middle of cauda. It resembles *Phorodon menthae* (Buckton), from which it differs in having swollen, longer cornicles and constricted cauda.

The following species of aphids have been collected around the Mt. Timpanogos Loop, or on the slopes of Mt. Timpanogos, in Utah. Unless otherwise indicated, collections are by the writer and the locality is Mt. Timpanogos. Additional distribution has been added for many of the species.

Cinara taxifoliae (Swain) (?) collected on *Pseudotsuga* at Aspen Grove, Mt. Timpanogos, August 26, 1943.

Schizolachnus pini-radiatae (Dvd.) on *Pinus ponderosa*, Mt. Timpanogos, July 12, 1942 and July 26, 1945. Also collected at Verdi, Nevada, August 17, 1945; Big Timber, Montana, June 4, 1942 (H. F. Thornley); Mt. Nebo, July 12, 1942; Beaver Canyon and Beaver Mt., Utah, July 10, 1942.

Anoecia querci Fitch, Mt. Timpanogos and Provo Canyon on *Cornus stolonifera*, September 21, 1935. Also taken in the Grand Canyon of the Snake River, Wyoming, September 11, 1941; Mt. Sterling, Utah, September 25, 1935.

Drepanaphis granovskiyi S.-K. along Mt. Timpanogos loop road on *Acer grandidentatum*, July 26, 1945.

Drepanosiphum braggii Gillette, American Fork Canyon and Mt. Timpanogos, July 26, 1945, on *Acer negundo*. Also taken on boxelder at Flagstaff, Arizona, September 22, 1944; Fish Haven, Idaho, August 2, 1945.

Myzocallis alhambra Davidson, on *Quercus*, Big Tree Camp, June 4, 1940 (C. L. Hayward.). Also taken at Mt. Nebo, July 12, 1942, Marysville Canyon; Beaver Mt., Utah, July 10, 1942.

Calaphis coloradensis Granovsky, along "Timp" loop on *Betula fontinalis*, July 26, 1945. Also taken in Wolf Creek Canyon, July 24, 1945, an *Anthocoris melanocerus* Reuter observed to be feeding on a wingless specimen; Smithfield Canyon, July 1, 1940.

Chaitophorus populifoliae Oestlund on *Populus*, Big Tree Camp, Mt. Timpanogos, July 16, 1940 (C. L. Hayward).

Pterocomma leulahensis (Ckll.), foothills of Mt. Timpanogos on *Salix*, June 4, 1942; on *Populus*, Fish Lake, July 28, 1926.

Clavigerus bicolor (Oestl.) on *Salix*, Mt. Timpanogos and Mt. Nebo, July 12, 1942. Also on *Salix lutea* at Big Cottonwood Canyon, Utah, June 29, 1925; on *Salix* at Manhattan, Montana, August 14, 1926 (C. B. Philip); Emigration Canyon, Idaho, June 24, 1923; Baker, Nevada, June 9, 1937 (T. O. Thatcher).

C. populifoliae (Fitch) on *Populus angustifolia*, upper American Fork Canyon, July 6, 1925; Mt. Nebo, July 12, 1942.

C. smithiae (Monell), Mt. Timpanogos, on *Salix*, July 26, 1945. Also on *Salix alba*, Farmington, Utah, July 29, 1924; at Baker, Nevada, June 9, 1937 (T. O. Thatcher); Mink Creek Canyon, Idaho, July 4, 1935; Oak Creek Canyon, Utah, July 10, 1942.

Aphis carbocolor Gillette on *Rumex*, American Fork Canyon, July 16, 1940. Also Flagstaff, Arizona, September 23, 1944; and Los Cruces, New Mexico, August 26, 1942 (B. A. Haws).

A. frangulae Kalt. on *Nepeta cataria*, Aspen Grove, July 26, 1945.

A. helianthi Monell on *Helianthus*, Mt. Timpanogos lower slopes, July 26, 1945.

A. maculatae Oestl. on *Populus*, upper American Fork Canyon, June 4, 1942.

A. maidis Fitch on grass, near Aspen Grove, July 26, 1945.

A. medicaginis Koch on *Medicago alba*, American Fork Canyon, September 21, 1935.

A. varians Patch on wild gooseberry, *Ribes*, American Fork Canyon, July 26, 1945. Also Beaver Mountain, Utah, on wild gooseberry, July 13, 1945, and Rabbit Ear Pass, Colorado, August 17, 1940; Liberty, Utah, on currant; Beaver Canyon, Idaho.

Pseudocamebaphis glauca G.-P. at Aspen Grove on *Artemisia*, July 26, 1945.

Amphorophora crataegi (Monell) on *Crataegus*, near Provo Canyon along loop, August 15, 1945.

Kakimia essigi (G.-P.) on *Aquilegia*, July 26, 1945. Also on *Aquilegia rubicunda* at Monte Cristo, Utah, July 21, 1942, and Vernon Canyon, July 19, 1940; at Lake Agnes, Cameron Pass, Colorado, August 21, 1940 (Knowlton-W. P. Nye).

K. wahiinkae (Hottes) on *Delphinium occidentale*, Aspen Grove, Mt. Timpanogos, July 1927 (V. M. Tanner), and July 26, 1942 (Knowlton), on larkspur. Also Manassa, Colorado, May 14, 1943 fundatrices (B. A. Haws, Det. M. A. Palmer), and July 12, 1943 (Haws).

Macrosiphum atripes G.-P. on Mt. Timpanogos, on *Aster*, September 10, 1940 (C. L. Hayward). Also Teton Pass, Wyoming, September 13, 1941; Boise, Idaho, June 16, 1939; and Beaver Mountain, Utah, July 10, 1942.

M. cozeeni (Hunter) on *Artemisia tridentata*, July 26, 1945 at Mt. Timpanogos. Also Hoback, Wyoming, September 11, 1941; Emigration Pass, Nevada, July 24, 1944; Ontario, Oregon, June 17, 1939; and Steamboat Springs, Colorado, August 18, 1935.

M. crenicorneum S.-K. on wild *Geranium*, Mt. Timpanogos, July 26, 1945. Also *Geranium richardsoni*, Teton Pass, Wyoming, September 13, 1941; in Logan Canyon and Monte Cristo, Utah, July 21, 1942; Mt. Nebo, July 25, 1942; Sardine Canyon, June 25, 1943; and Card Canyon, off Logan Canyon, June 16, 1940 (Knowlton-W. P. Nye). Dr. C. Lynn Hayward collected this species at Aspen Grove, July 5, 1940.

M. erigeronensis (Thomas) on *Lupinus* (? if so probably accidental), at Hidden Lake, Mt. Timpanogos, July 27, 1940 (C. L. Hayward). Also on *Chrysothamnus viscidiflorus* and *C. nauscosus* at Linland, Colorado, August 18, 1935; on *Lactuca* at Moab, July 29, 1932; *Grindelia squarrosa*, Salem, Oregon, June 17, 1939.

M. laevigatae Essig on *Salix*, Timpanogos Loop and Provo Canyon, July 26, 1945. Also on willow at Wells, Nevada, August 16, 1945; at Stayton, Oregon, May 7, 1936 (Coll.?).

M. ludoviciana (Oestlund) on *Artemisia vulgaris*, Mt. Timpanogos, July 12, 1942.

M. macrosiphum (Wilson) on elderberry, Mt. Timpanogos loop, July 12, 1942. Also on *Amalanchier* at Portland, Oregon, June 21, 1939; Little Rock, Washington, June 18, 1937 (W. W. Baker).

M. schranki Theobald on *Urtica gracilis*, Mt. Timpanogos and Mt. Nebo, July 12, 1942; Beaver Mountain, Utah, July 10, 1942; Glenn's Ferry, Idaho, June 16, 1939; Grand Canyon of the Snake River, Wyoming, September 11, 1941; west of Reno, Nevada, August 17, 1945; Junction, Lakota and Oak Creek Canyon, Utah.

M. solanifolii (Ashm.) on wild *Geranium* and *Lactuca*, Mt. Timpanogos.

M. stanleyi Wilson on *Sambucus coerulca*, Mt. Timpanogos and North Fork of Provo River, and Daniels Canyon, Utah, July 26, 1945; Monte Cristo, August 21, 1942 (Knowlton-R. S. Roberts-S. L. Wood); males numerous on Mt. Nebo Loop, Immigration Canyon, August 14, 1943; and upper Ephraim Canyon, September 6, 1945; Shoshone Lake, Wyoming, September 11, 1941.

M. valerianae (Clarke) on *Chamaenerium angustifolia*, at Cameron Pass, Colorado, August 21, 1940. Dr. Hayward collected this on *Rudbeckia* at Big Tree Camp, Mt. Timpanogos, August 2, 1940. One alate was collected on sage brush, probably an accidental host, at Monticello, Utah, June 18, 1933.

Forda olivacea Rohwer along Mt. Timpanogos Loop, on roots of giant rye grass, July 26, 1945.

Mindarus abietinus Koch on *Abies*, July 12, 1942 and July 26, 1945. Dr. C. L. Hayward had previously collected this at Aspen Grove, July 6, 1940. Also taken in Wolf Creek Canyon, July 24, 1945; and on alpine fir at Card Canyon, south of Logan Canyon, July 25, 1938 (Knowlton-W. P. Nye) in Utah; Bellines, Washington, June 1, 1935 (W. W. Baker); Puyallup, Washington, July 4, 1937 (by the late Ensign H. C. Bemion); *Abies lasiocarpa*, Pingree Park, Colorado, August 21, 1935; Puffer Lake on Beaver Mountain, July 10, 1942, and Mt. Nebo, July 12, 1942, Utah.

SUPPLEMENT: Part I (Great Basin Nat. III (1) :5-8, 1942) of the "Aphids of Mount Timpanogos, Utah" was prepared principally to describe three apparently undescribed species of aphids, found among material submitted for identification by Dr. C. Lynn Hayward of the Zoology and Entomology Department of the Brigham Young University. These species were:

Myzus haywardi Knowlton, collected on *Galium* or *Rudbeckia* at Big Tree Camp, Mt. Timpanogos, Utah, June 7, 1940 (C. L. Hayward).

Macrosiphum timpanogos Knowlton was collected at Hidden Lake Camp, Mt. Timpanogos, July 23, 1940 (C. L. Hayward), without host record. It probably occurs on a lupine of some kind.

Cinara osborni Knowlton was collected on *Pseudotsuga mucronata* at Aspen Grove, Mt. Timpanogos, June 30, 1940 (C. L. Hayward).

In addition, Dr. Hayward had collected:

Macrosiphum stanleyi Wilson on *Sambucus microbotrys* at Big Tree Camp, June 4, August 1 and 2, 1940.

M. crenicornum S.-K. probably on wild *Geranium*.

Mindarus obiectinus Koch on *Pseudotsuga mucronata*, which probably was an accidental host.

To this list the writer added the following species, collected chiefly from lower slopes, and along highways of the "Mt. Timpanogos Loop":

Eulachnus agilis (Kalt.) on *Pinus*, *Eucraphis gillettei* Dav. on *Alnus*, *Chaitophorus terminalis* Mon. on *Salix*, *Periphyllus negundinis*

(Th.) on *Acer negundo*, *P. populicola* (Thos.), and *Clavigerus salicis* (L.) on *Salix*, *Aphis artemisisola* Wms. on *Artemisia tridentata*, *A. gregalis* Knlt. on *Chrysothamnus viscidiflorus*, *A. ribiensis* G.-P. on *Ribes*, *Cavariella capreae* (Fab.) on *Salix*, *Epamecibaphis frigidae* Oest. on *Artemisia*, *Flabellomicrosiphum tridentatae* (Wils.) on *Artemisia tridentata*, *Microsiphum artemisiac* (Gill.) on *Artemisia vulgaris* and *A. tridentata*, *Amphorophora nervata* (Gill.) on *Rosa*, *A. ribicella* (Dav.) on *Ribes*, *A. rubicola* (Oest.) on *Rubus*, *A. sonchi* (Oest.) on *Ribes*, *Capitophorus glandulosus* (Kalt.) on *Artemisia*, *C. gregarius* Knlt. and *C. oestlundii* Knlt. on *Chrysothamnus nauseosus*, *Kakimia cynosbati* (Oest.) on *Ribes*, *Macrosiphum packi* Knlt. on *Chrysothamnus nauseosus*, and *Thecabius populi-monilis* (Riley) in bead-like leaf galls of *Populus angustifolia*.